CLAIMS

We claim:

1.   A method for call parking, the method comprising the steps of:

5   establishing a first communication session between a first the user agent and a second

user agent;

entering a call park number by the second user agent to initiate a call park for the first

communication session;

registering the call park number at a server;

10   parking the first communication session at the second user agent;

establishing a second communication session between the third user agent and the second

user agent by the third user agent entering the call park number;

sending to the third user agent the address of the first user agent; and

establishing a third communication session between the third user agent and the first user

15 agent.

2.   The method of claim 1 further comprising the step of authorizing the second user

agent for call parking at the server after the second user agent enters the call park number.

20   3.   The method of claim 1 further comprising the step of using the call park number

as a reference for the first communication session.

4.   The method of claim 1 further comprising the step of routing the third user agent

to the second user when the server receives the call park number from the third user agent.

5.   The method of claim 4, further comprising the step of referring the third user

agent to invite the first user agent to initiate the third communication session after the server

routes the third user agent to the second user agent.

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6.   The method of claim 1, further comprising the step of terminating the first

communication session when the first user agent and the third user agent become engaged in

the third communication session.

10   7.   The method of claim 1, further comprising the step of deregistering the call park

number at the server.

8.   The method of claim 1, further comprising the step of terminating the second

communication session when the first user agent and the third user agent become engaged in

15   the third communication session.

9.   The method of claim 1, further comprising the step of using real time protocol

(RTP) media exchange for the first communication session, the second communication session,

and the third communication session.

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10. The method of claim 1, further comprising the step of operating the third user agent

with the same user that operated the second user agent.

11.   A method for call parking in a network telephony system, the method comprising the steps of:

establishing a first communication session between a first user agent and a second user agent;

5   entering a call park number by the second user agent to initiate a call park of the first communication session;

sending the call park number to the server;

authorizing the second user agent for call parking at the server;

registering the call park number at the server;

10   parking the first communication session at the second user agent;

receiving a call at the server from the third user agent by the third user agent entering the call park number;

routing the third user agent to the second user agent;

establishing a second communication session between the third user agent and the second

15   user agent;

sending to the third user agent the address of the first user agent;

establishing a third communication session between the third user agent and the first user agent;

terminating the first communication session between the first user agent and the second

20   user agent;

deregistering the call park number at the server; and

terminating the second communication session between the second user agent and the third user agent.

12.   The method of claim 11, further comprising the step of using real time protocol (RTP) media exchange for the first communication session, the second communication session, and the third communication session.

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13.   The method of claim 11, further comprising the step of referring the third user agent to invite the first user agent to initiate the third communication session after routing the third user agent to the second user agent.

10   14.   The method of claim 13, further comprising sending to the third user agent the address of the first user agent.

15.   The method of claim 11 further comprising the step of using the call park number as a reference for the first communication session.

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16.   The method of claim 11, further comprising the step of operating the third user agent with the same user that operated the second user agent.

17.   A method for call parking in a SIP telephony system, the method comprising the

20   steps of:

establishing a first communication session between a first user agent and a second user agent;

entering a call park number by the second user agent to initiate a call park of the first

communication session at a SIP proxy server;

sending the call park number to the SIP proxy server;

authorizing the second user agent for call parking at the SIP proxy server;

5   registering the call park number at the SIP proxy server;

receiving a call at the SIP proxy server from a third user agent by the third user agent

entering the call park number;

routing the third user agent to the second user agent;

sending the address of the first user agent to the third user agent;

10   establishing a second communication session between the third user agent and the first

user agent;

deregistering the call park number at the SIP proxy server; and

terminating the first communication session.

15   18.   The method of claim 18 further comprising the step of the first user agent

accepting the second communication session and terminating the first communication session by

the second user agent receiving a SIP REPLACES header along with the SIP INVITE message

from the third user agent when establishing the second communication session.

20   19.   The method of claim 18, further comprising the step of using real time protocol

(RTP) media exchange for the first communication session and the second communication

session.

20. The method of claim 18 further comprising the step of sending a SIP REGISTER message to the SIP proxy server to trigger registration of the call park number as a reference for the first communication session after the second user enters the call park number.

5   21. The method of claim 18 further comprising the step of the SIP proxy server forwarding a SIP INVITE message to the second user agent when routing the third user agent to the second user agent.

22. The method of claim 18 further comprising the step of the second user agent

10   sending to the third user agent a SIP REFER message when sending the address of the first user agent to the third user agent in response to the SIP INVITE message sent by SIP proxy server to the second user agent.

23. The method of claim 18 further comprising the step of operating the third user

15   agent with the same user that operated the second user agent.

24. The method of claim 18 further comprising the step of using the call park number as a reference for the first communication session.